

METHOD AND APPARATUS FOR CHEMICAL-MECHANICAL POLISHING AND MANUFACTURE OF SEMICONDUCTOR SUBSTRATE

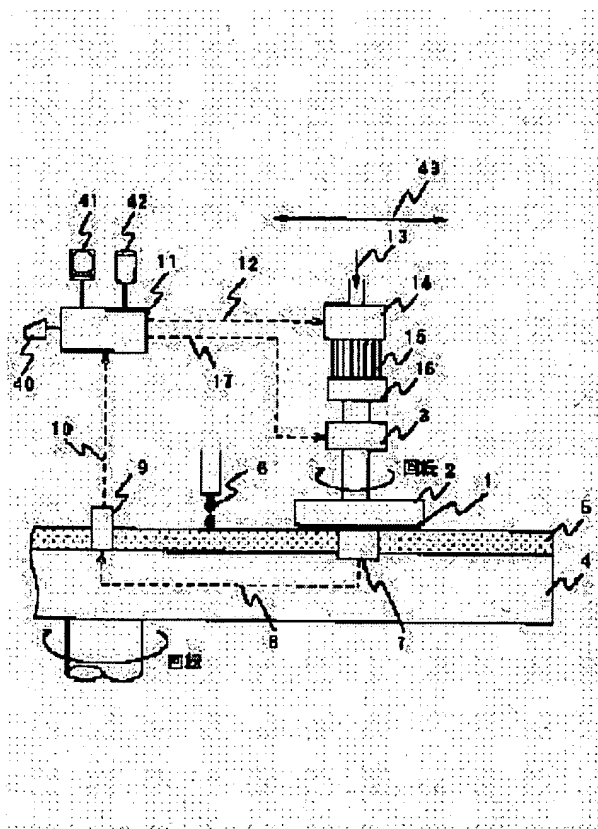
Patent number: JP9148284
Publication date: 1997-06-06
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Classification:
- **International:** H01L21/304; B24B37/00; B24B49/16
- **European:**
Application number: JP19950310191 19951129
Priority number(s): JP19950310191 19951129

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Abstract of JP9148284

PROBLEM TO BE SOLVED: To make the thickness of the polishing insulating film formed on a board uniform by chemical and mechanical polishing the board surface by controlling the polishing pressures at a plurality of two-dimensional areas in the surface.

SOLUTION: A workpiece 1 supported by a chuck 2 is brought into contact with a polishing pad 5 while supplying polishing liquid 6 onto the rotating pad 5. Further, the polishing load is applied to the chuck 2 rotated by a motor 3. It is reciprocating moved relatively to a polishing surface plate 4 in the radial direction of the plate 4. The workpiece 1 is chemically and mechanically polished by adopting both the chemical polishing by the chemical reaction with the alkaline solution contained in the liquid 6 and the mechanical polishing by the abrasive of SiO₂ or the like. Thus, the thickness of an insulating film or metal film can be made uniform and flat.



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